

*Field Operations and Technology  
for Enhanced Performance*

# ELECTRONIC COLLECTION OF FIELD DATA

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CEO/Co-Founder



An aerial photograph of a city, likely Shanghai, featuring a large, multi-level highway interchange in the foreground. The city skyline is visible in the background with numerous skyscrapers. The image has a purple and blue color overlay.

# THE CONSTRUCTION INDUSTRY IS EXPERIENCING PROFOUND DISRUPTION

#areyouready?



# WHAT IS DISRUPTION?

Disruption is a business model change where segments of an industry cannot adapt



# NEW APPROACHES TO ALL ASPECTS OF ASSET CONSTRUCTION

Ownership

State



Public/Private

Delivery

Design/Bid/Build



Design/Build, CM/GC,  
etc.

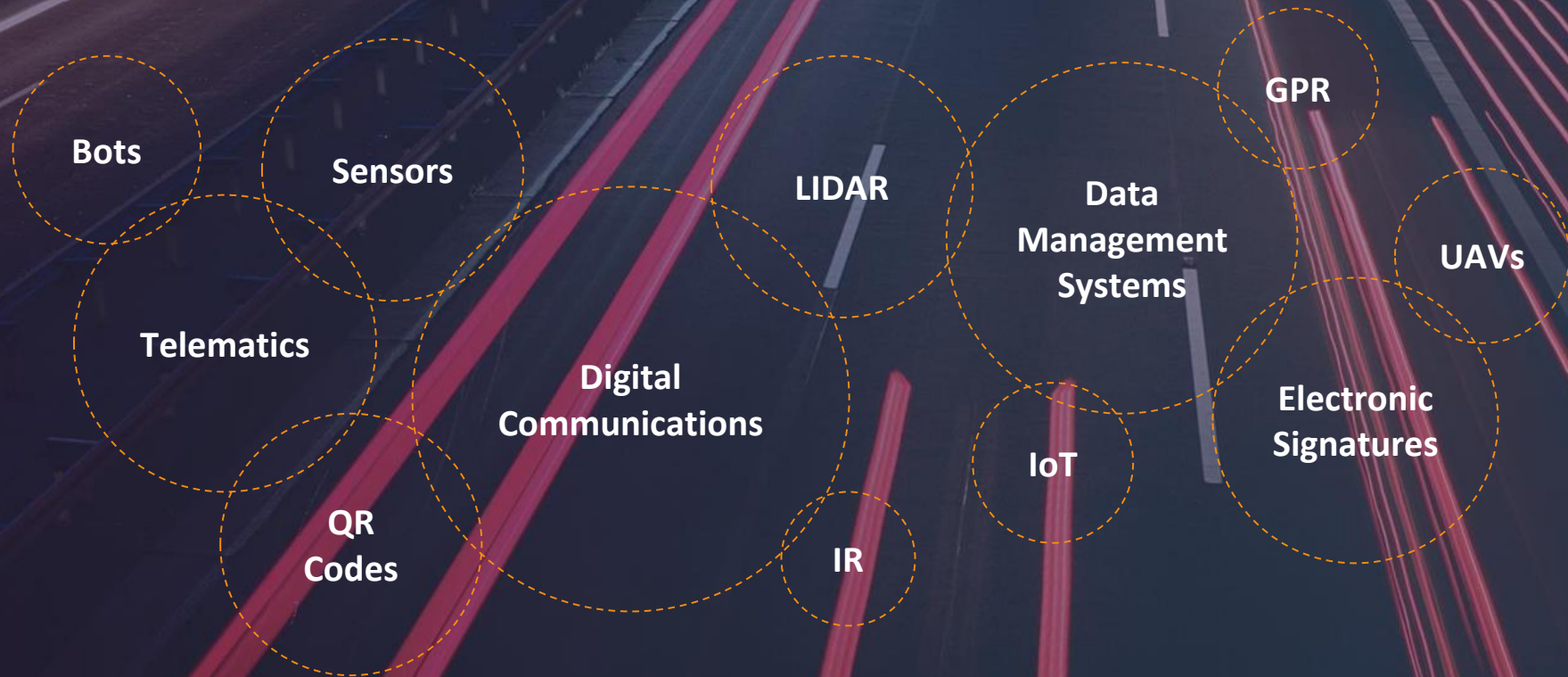
Financing

Public



PPP

# AN EXPLOSION OF NEW DATA GATHERING TECHNOLOGIES

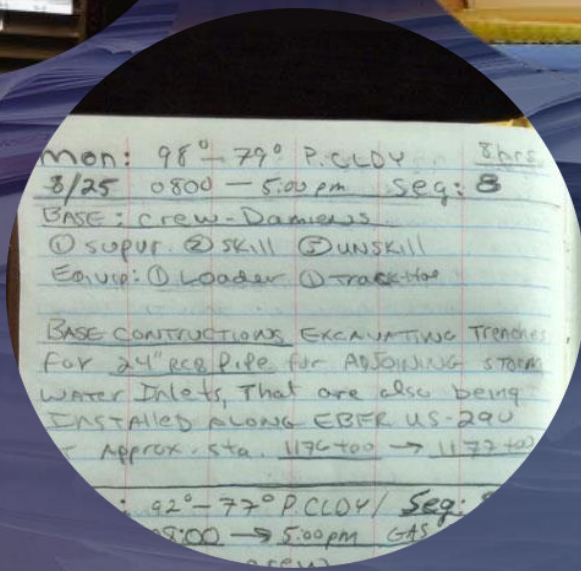


# NEW APPROACHES OFFER PROMISE BUT EXECUTION IS VERY COMPLEX





# STATUS QUO IS OBSOLETE



# AND PROJECTS ARE BECOMING MORE CHALLENGING AND RISKS ARE GROWING

“Projects are over Budget 80% of the time and take 20% longer to finish. The industry is ripe for disruption.”

*McKinsey, 2016*

**#reducerisk**



## NEWS

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# POOR COLLABORATION AMONG PROJECT TEAMS

## NEWS

### Construction Consulting Firm Walks Off Four State DOT Projects in Contract Dispute



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# PUBLIC OUTRAGE DUE TO BUDGET AND TIME OVERAGES

NEWS

## State DOT bypass finally, entirely open Project of 6.2 miles took 13 years, cost \$150M

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The background is a blurred photograph of a construction site. Several workers in safety gear are visible in the distance. In the foreground, a wooden table holds a large architectural blueprint with technical drawings.

**WHAT IF BY THIS TIME NEXT YEAR  
YOU COULD GREATLY REDUCE YOUR  
EXPOSURE TO ALL OF THAT RISK?**



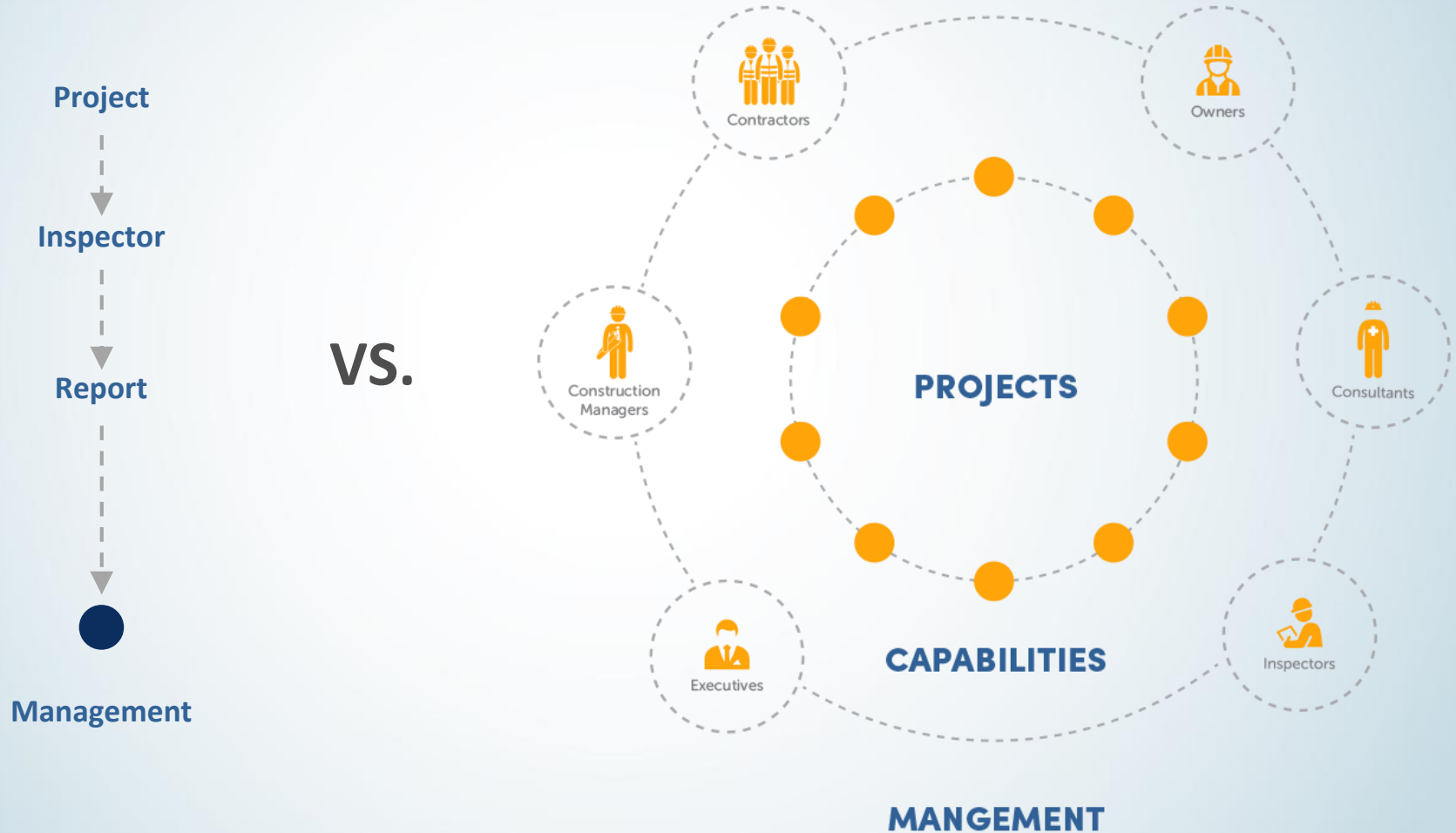
## PROJECT INTELLIGENCE

Information

Communication

Insights

# IT'S A NEW WAY OF THINKING



# AND A NEW PARADIGM FOR DISTRIBUTING INFORMATION



VS.



[#beyondreports](#)



**ACCUMULATED PROJECT  
INTELLIGENCE BECOMES ASSET  
INTELLIGENCE**



# THAT'S WHY WE BUILT HEADLIGHT



# PROJECT INTELLIGENCE IN ACTION



## EASE OF USE



HeadLight gives us the ability to collect lots of data in little time. We are able to generate, customer facing, professional looking reports in as little as 5-10 minutes. We are able to spend time on the job vs. the time it takes to create reports.

*- Inspector*

# IMPROVE PROJECT VISIBILITY



HeadLight is a living record of what happened on the project, available to us after we have delivered. HeadLight allows us remote access anywhere so that we can see actions in the field as the work is done.

*- Project Manager*



# PROJECT INTELLIGENCE REDUCES RISK



HeadLight gives inspectors the ability to find, access, and share reliable information in a way that was previously unavailable. HeadLight provides the Department the ability to find information when they need it and specifically what happened on that day.

*- Project Manager, State DOT*

# WIN MORE WORK



“Investing in innovative technology like HeadLight gives us the tools needed to observe, document and archive project details, such as site conditions and material delays, enabling us to provide superior outcomes for our clients. It’s a value add that really differentiates us from our competition.”

- VP Operations



**PROJECT INTELLIGENCE IN ACTION**

# Project Intelligence In Action

## Example:

- Collecting density data via mobile device and allowing for auto completion and auto calculation of existing forms digitally to eliminate paper processes

The screenshot displays the HEADLIGHT FIELDBOOK mobile application interface. The top navigation bar includes a search icon and a user profile icon. The main content area shows a list of density measurements for '164 Access Widening' on '03 October 2017'. The table includes columns for Sublot Number, Distance, Offset, Nuclear Density, Left Joint Density, and Right Joint Density. Below the table, there is a section for 'QC Testing Results by Nuclear Gauge' which includes a table with columns for Sublot Number, Location, Nuclear Density, Sublot Average, and Joint Density. The results show an average nuclear density of 142.417 and a 'Pass' status.

**164 Access Widening**

03 October 2017

Sublot Number	Distance	Offset	Nuclear Density	Left Joint Density	Right Joint Density
0	0	0	140	140	140
3	69	2	142.3000030517578	144.3000030517578	140.80000305175
3	34	11	141.5	134.8000030517578	138.69999694824
2	423	6	144.1999969482422	141.6999969482422	139.80000305175
2	178	1	142.3999938964844	138.1000061035156	141.69999694824
1	216	3	138.8999938964844	140.1000061035156	139.80000305175
1	4	8	145.1999969482422	144.8999938964844	143.60000610351

02 October 2017

Sublot Number	Distance	Offset	Nuclear Density	Left Joint Density	Right Joint Density
1A	4	8	145.200	144.900	143.600
1B	216	3	138.900	142.050	140.100
2A	178	1	142.400	138.100	141.700
2B	423	6	144.200	141.700	139.800
3A	34	11	141.500	134.800	138.700
3B	69	2	142.300	141.900	144.300
Average			142.417	142.8	140.800

**QC Testing Results by Nuclear Gauge**

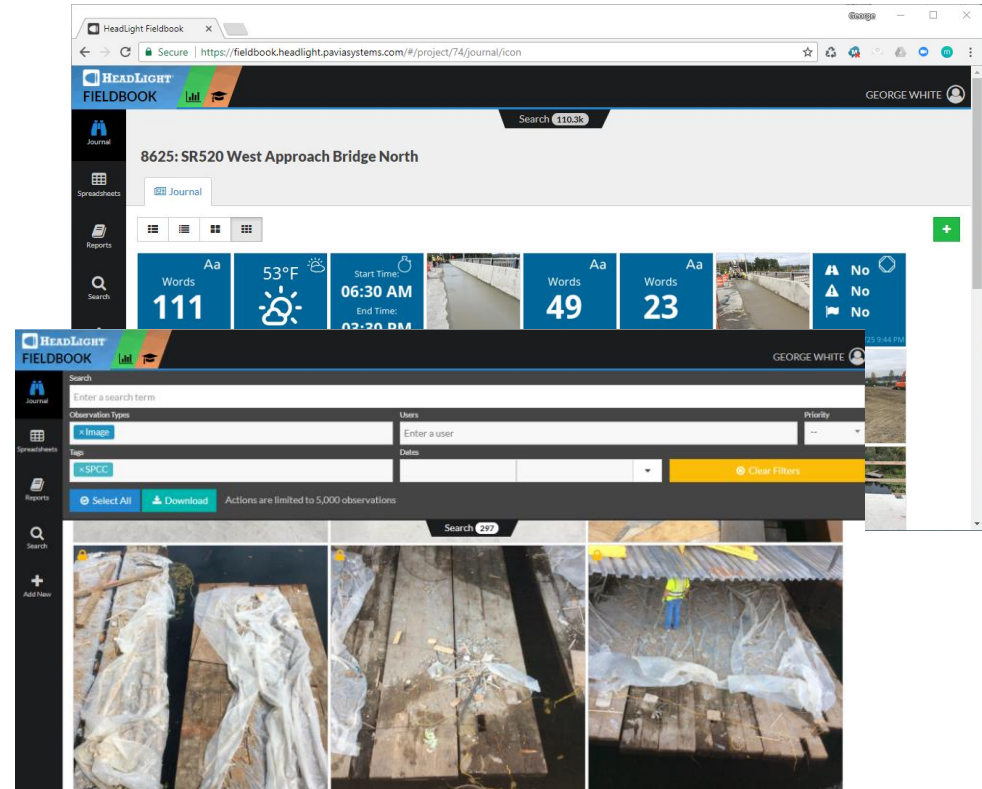
Sublot Number	Location	Nuclear Density	Sublot Average	Joint Density
		lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )	lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )	lbs/ft <sup>3</sup> (kg/m <sup>3</sup> )
1A	4	8	145.200	144.900
1B	216	3	138.900	142.050
2A	178	1	142.400	138.100
2B	423	6	144.200	141.700
3A	34	11	141.500	134.800
3B	69	2	142.300	141.900
Average			142.417	142.8



# Project Intelligence In Action

## Example:

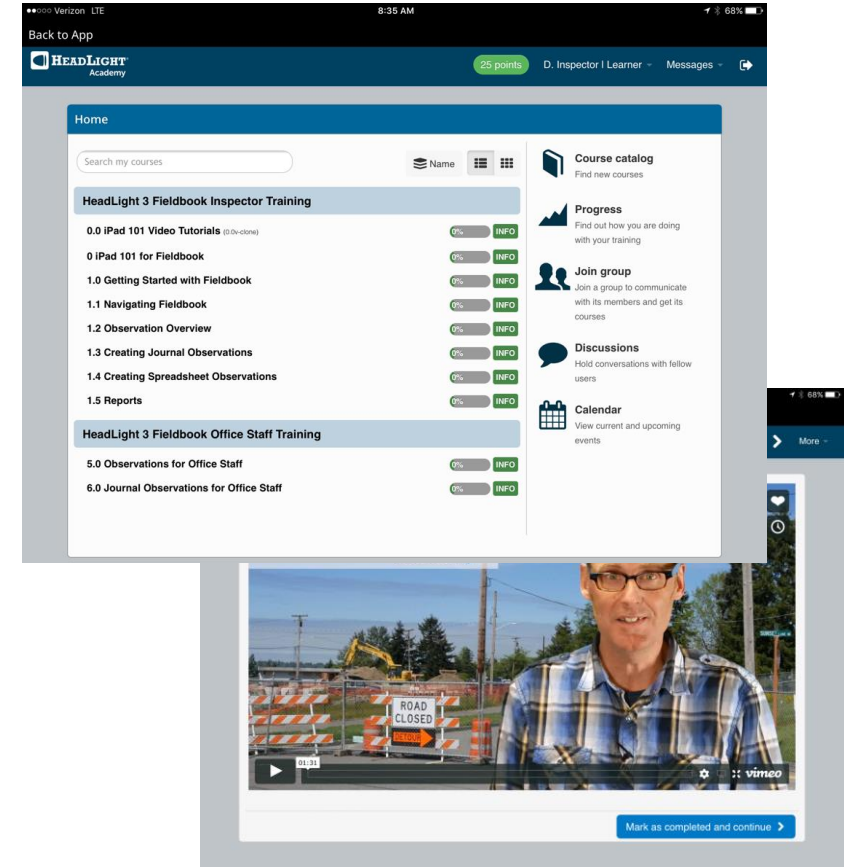
- Fuel spill on construction job reported by neighbor and need to verify documentation and communicate to environmental services



# Project Intelligence In Action

## Example:

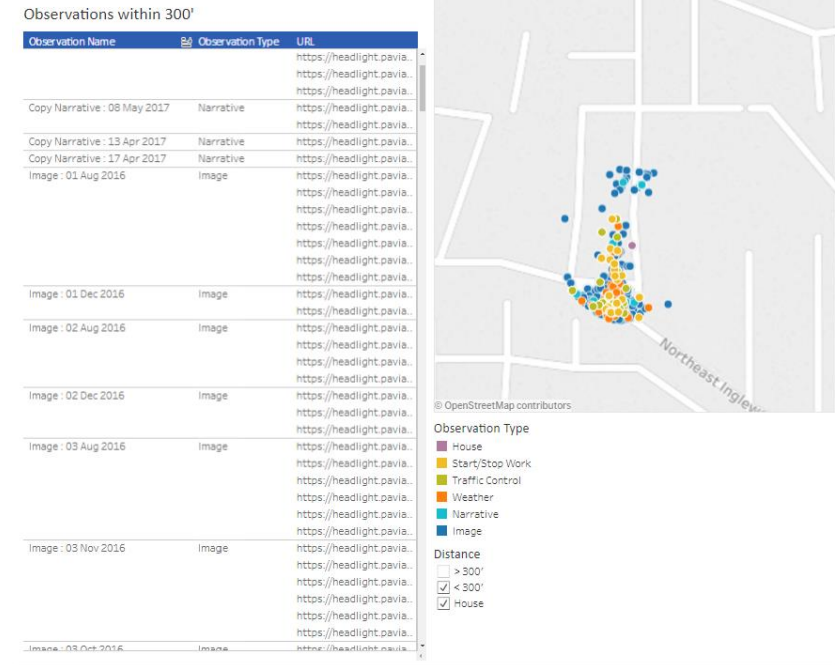
- Deliver just in time training to personnel in the field
  - Toolbox talk
  - Refresher on what to look for when observing thin overlay construction.



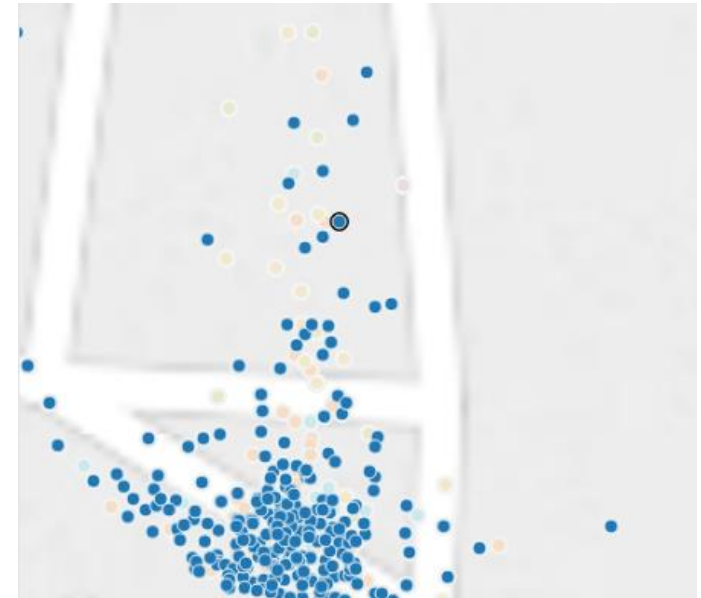
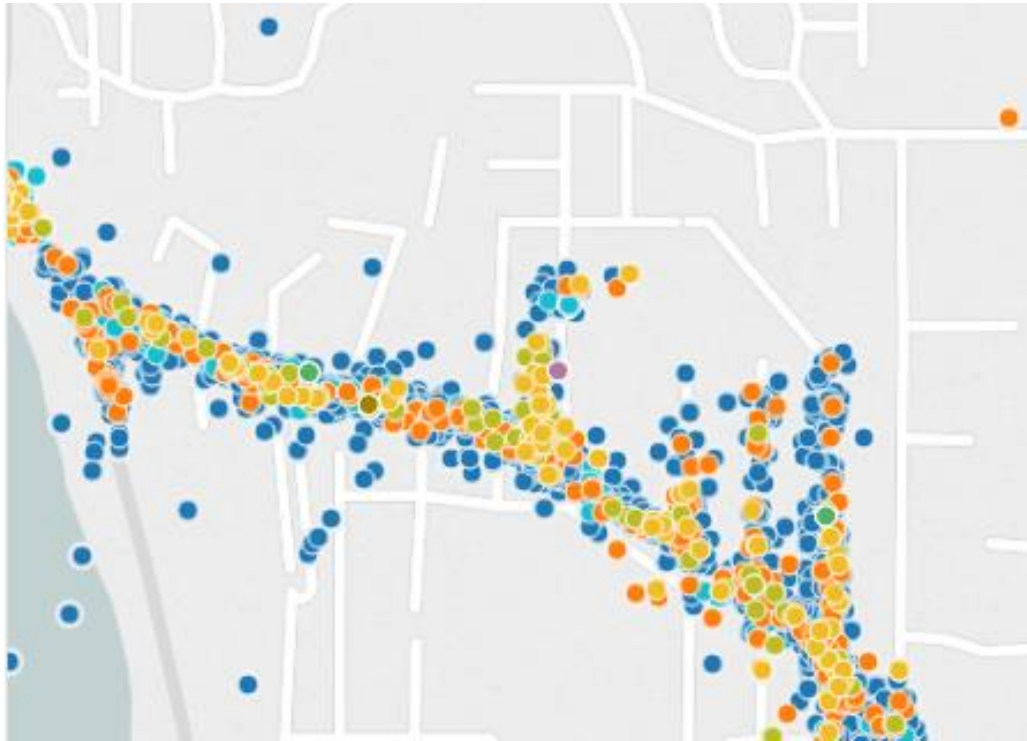
# Project Intelligence In Action

## Example:

- Search for evidence and supporting information to respond to claim from neighbor regarding damage to their driveway from construction activities

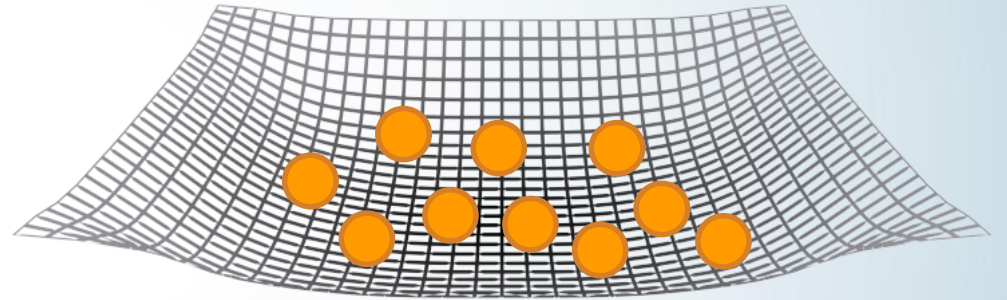
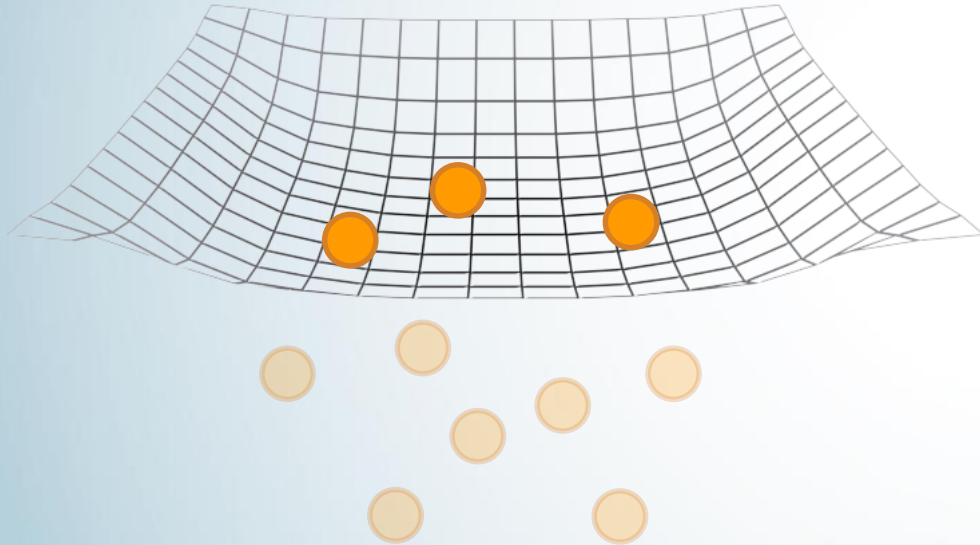


# Project Intelligence In Action





# REDUCE RISK WITH A BETTER SAFETY NET



# CONTRACTOR SOFTWARE LANDSCAPE



# CONTRACTOR SOFTWARE LANDSCAPE



An aerial, top-down view of a multi-lane highway. The road is dark asphalt with white dashed lane markings. Several cars are visible, including a white car in the upper left, a yellow car in the center, and several orange and blue cars in the lower half. The highway is flanked by concrete barriers. The text "Thank You." is centered in the middle of the image.

**Thank You.**